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## 9. Patterns

**Program Name:** Patterns.java

**Input File:** patterns.dat

Given two strings of characters, you are to write a program that determines if the patterns are the same. Two patterns are considered to be the same if each unique character in string one is replaced with a corresponding unique character in string two. For example, `abc44cd` and `defzzfx` have the same pattern since each `a` was replaced with a `d`, each `b` was replaced with an `e`, each `c` was replaced with an `f`, each `4` was replaced with a `z`, and each `d` was replaced with an `x`.

### Input

The first line of input will contain a single integer `n` that indicates the number of pairs of strings to follow. Each of the following `n` lines will contain two strings of equal length that will be separated by a space. Each string will contain at least two characters.

### Output

For each pair of strings input, you will print `YES` if the strings have the same pattern or `NO` if they do not.

### Example Input File

```
4
abcdef w3455
rr555bbc ttfffcbb
RRRsssTTss77 333YYYvvYYaa
gggg9999rrrr4444 aaaabbbbbaaaabbbb
```

### Example Output to Screen

```
NO
YES
YES
NO
```